

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended)

~~In an~~ A method for offshore pipeline laying system, the pipeline being laid on the seabed by a surface laying vessel from a first position on the seabed to a second position on the seabed for making a connection at said second position to a subsea structure, and presenting a catenary length (L) between the seabed and the laying vessel, a said method for establishing the length of pipeline required to be provided from the vessel to reach the second position on the seabed, said method comprising the steps of:

installing a first seabed transponder on the pipelay route centreline centerline at the second position;

installing a second seabed transponder on the pipeline pipelay route centerline spaced upstream from the first seabed transponder at a distance (D') greater than the catenary length (L) of the pipeline;

establishing the positions of the first and second seabed transponders so as to determine the exact distance separating said first and second seabed transponders;

attaching a first pipe transponder on the pipeline and laying the pipeline at the first position so that it will land close to the second seabed transponder;

interrogating the second seabed transponder and the first pipe transponder in a relative mode to establish the exact distance between them;

comparing the established distance with the distance separating the first and second seabed transponders to calculate the remaining length of pipeline required to reach the second position;

cutting the pipeline according to said remaining length;

welding the connector to the pipeline; and thereby

laying the pipeline to the second position with the connector being at the second position.

Claim 2 (previously presented)

The method of claim 1, wherein the distance (D') is comprised between ($L + 300\text{ft}$) and ($L + 700\text{ft}$).

Claim 3 (currently amended)

The method of claim 1, wherein a third seabed transponder is arranged on the pipeline-pipelay route upstream from the second seabed transponder.

Claim 4 (original)

The method of claim 3, wherein a second pipe transponder is attached to the pipeline upstream from the first pipeline transponder.

Claim 5 (original)

The method of claim 4, wherein the distance between the first and second pipe transponders is shorter than the distance between the second and third seabed transponders.

Claim 6 (previously presented)

The method of claim 4, wherein the pipeline is laid so that the first and second pipe transponders are laid in between the second and third seabed transponders.

Claim 7 (previously presented)

The method of claim 1, wherein another pipe transponder is attached to the pipeline to help the positioning of the connector at the second position.

Claim 8 (original)

The method of claim 4, wherein said second and third seabed transponders are spaced about 500 feet apart.

Claim 9 (original)

The method of claim 8, wherein said first and second pipeline transponders are spaced about 300 feet apart.

Claim 10 (previously presented)

The method of claim 9, wherein the pipeline is laid so that the first and second pipe transponders are laid in between the second and third seabed transponders.

Claim 11 (currently amended)

In an A method for offshore pipeline laying system, the pipeline being laid on the seabed by a surface laying vessel from a first position on the seabed to a second position on the seabed, a said method for establishing the length of pipeline required to be provided from the vessel to reach the second position on the seabed, said method comprising the steps of:

installing first and second seabed transponders along the pipelay route, the first seabed transponder being near said second position;

determining the distance separating said first and second seabed transponders;

installing a pipe transponder on said pipeline; and

interrogating said second seabed transponders, and said pipe transponder to determine the respective distance between them;

wherein the seabed transponders are arranged sufficiently near the pipelay route centreline centerline so that the respective distances separating said second seabed transponders and said pipe transponder can be used to establish the remaining length of pipeline needed to reach the second position.

Claim 12 (currently amended)

The method of claim 11, wherein the seabed transponders are arranged on the pipelay route centreline centerline.

Claim 13 (previously presented)

The method of claim 11, further comprising the steps of:

installing a third seabed transponder along the pipelay route;

installing a second pipe transponder on said pipeline near said first pipe transponder; and

interrogating said third seabed transponder and said second pipe transponder so as to determine the respective distance between them so as to further establish the remaining length of pipeline needed to reach the second position.

Claim 14 (previously presented)

The method of claim 4, wherein a third pipe transponder is attached to the pipeline to help the positioning of the connector at the second position.

Claim 15 (currently amended)

~~In an A method for offshore pipeline laying system, the pipeline being laid on the seabed by a surface laying vessel from a first position on the seabed to a second position on the seabed, a said method for establishing the length of pipeline required to be provided from the vessel to reach the second position on the seabed, said method comprising the steps of:~~

installing a seabed transponder along the pipelay route;

installing a pipe transponder on said pipeline; and

interrogating said seabed transponder and said pipe transponder to determine the respective distance between them;

wherein the seabed transponder is arranged sufficiently near the pipelay route centreline centerline so that the respective distance separating said seabed transponder and said pipe transponder can be used to establish the remaining length of pipeline needed to reach the second position on the seabed.

Claim 16 (currently amended)

The method of claim 15, wherein the seabed transponder is arranged on the pipelay route centreline centerline.

Claim 17 (currently amended)

The method of claim 15, further comprising the steps of:
installing another seabed transponder along the pipelay route;
installing a second pipe transponder on said pipeline near said first pipe transponder; and
interrogating said other seabed transponder and said second pipe transponder so as to determine the respective distance between them so as to further establish the remaining length of pipeline needed to reach the second position.